

03060103-140

(Little River/Lake Thurmond)

General Description

Watershed 03060103-140 is located in Anderson, Abbeville, and McCormick Counties and consists primarily of **Little River** and its tributaries as it flows into **Lake Thurmond**. The watershed occupies 236,683 acres of the Piedmont region of South Carolina. The predominant soil types consist of an association of the Cecil-Hiwassee series. The erodibility of the soil (K) averages 0.26, and the slope of the terrain averages 9%, with a range of 2-15%. Land use/land cover in the watershed includes: 71.2% forested land, 23.5% agricultural land, 2.6% barren land, 1.2% urban land, 1.1% water, and 0.4% forested wetland.

Barkers Creek (Blue Barker Creek, Long Branch) and Corner Creek join to form the Little River, which then accepts drainage from Camp Creek, Hogskin Creek (another Long Branch, Little Hogskin Creek), Chickasaw Creek, Spur Creek (Johnson Creek, Blacks Creek), Park Creek (Reids Creek), and Cochran Branch (Tanyard Branch). Penny Creek enters the river next, followed by Shanklin Creek, McKenley Creek (Morrow Creek, Baskin Branch, Gill Creek), and Sawney Creek (Sherard Lake). Calhoun Creek originates near the City of Abbeville and accepts drainage from Reid Creek, Redd Creek, Flagreed Creek, Jim Knox Branch, and White Creek (Hammond Branch, Bowie Branch, Calhoun Creek, Hillbern Creek, Hartzog Branch) before draining into the Little River. Further downstream, the river accepts drainage from Lott Creek, Lee Creek, Bell Creek, and Scott Creek. The river then begins to impound into the Little River arm of Lake Thurmond and accepts drainage from Connor Creek (Cole Branch), Wilson Spring Creek, Horse Branch, Ludlow Branch, Mill Creek, the Long Cane Creek watershed, Buffalo Creek (Vall Branch, Taylor Branch, Engevine Branch), and Baker Creek. There are a total of 485.3 stream miles and 2,673.2 acres of lake waters in the South Carolina portion of the watershed, all classified FW. The bottom third of the watershed is within the Sumter National Forest.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
SV-164	W/BIO	FW	LITTLE RIVER AT S-01-24
SV-733	BIO	FW	HOGSKIN CREEK AT SC 184
SV-348	W/BIO	FW	LITTLE RIVER AT S-01-32
SV-644	BIO	FW	GILL CREEK AT S-01-32
SV-052	P	FW	SAWNEY CREEK AT CO. RD 1.5 MI SE OF CALHOUN FALLS
SV-171	BIO	FW	CALHOUN CREEK AT S-01-40
SV-192	W/BIO	FW	LITTLE RIVER AT S-01-19
CL-039	W	FW	LITTLE RIVER ARM OF LAKE THURMOND

Little River – There are four stations along the Little River. At the furthest upstream site (**SV-164**), aquatic life uses are fully supported based on macroinvertebrate community, physical, and chemical data. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions. Further downstream (**SV-348**), aquatic life uses are also fully supported based on macroinvertebrate community,

physical, and chemical data. Recreational uses are not supported at this site due to fecal coliform bacteria excursions.

Aquatic life uses are fully supported at the next site downstream (**SV-192**) based on macroinvertebrate community, physical, and chemical data. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions. The site located on the Little River arm of Lake Thurmond (**CL-039**), is fully supported for aquatic life and recreational uses.

Hogskin Creek (SV-733)- Aquatic life uses are fully supported based on macroinvertebrate community data.

Gill Creek (SV-644)- Aquatic life uses are fully supported based on macroinvertebrate community data.

Sawney Creek (SV-052)- Aquatic life uses are partially supported due to dissolved oxygen excursions. In addition, there is a significant decreasing trend in dissolved oxygen concentration and a significant increasing trend in total nitrogen concentration. There is a significant decreasing trend in pH. A significant decreasing trend in turbidity suggests improving conditions for this parameter. Recreational uses are not supported due to fecal coliform bacteria excursions. This is compounded by a significant increasing trend in fecal coliform bacteria concentrations.

Calhoun Creek (SV-171) - Aquatic life uses are fully supported based on macroinvertebrate community data.

Natural Swimming Areas

***FACILITY NAME
RECEIVING STREAM***

***PERMIT #
STATUS***

BAKER CREEK STATE PARK
LITTLE RIVER ARM OF LAKE THURMOND

35-N01
ACTIVE

Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-054	GB	PIEDMONT BEDROCK	ABBEVILLE
AMB-075	GB	SAPROLITE	ABBEVILLE

All water samples collected from ambient monitoring wells **AMB-054** and **AMB-075** met standards for Class GB groundwater.

NPDES Program

Active NPDES Facilities

RECEIVING STREAM

FACILITY NAME

PERMITTED FLOW @ PIPE (MGD)

NPDES#

TYPE

COMMENT

HILLBERN CREEK TRIBUTARY
MILLIKEN & CO./SHARON PLT
PIPE #: 001 FLOW: M/R

SC0023477
MINOR INDUSTRIAL

DAVIS BRANCH
BIBB COMPANY/ABBEVILLE PLT
PIPE #: 001 FLOW: M/R

SCG250020
MINOR INDUSTRIAL

SAWNEY CREEK
TOWN OF CALHOUN FALLS
PIPE #: 001 FLOW: 0.55
PIPE #: 001 FLOW: 1.50 (PROPOSED TIER)
PIPE #: 001 FLOW: 3.00 (PROPOSED TIER)

SC0025721
MINOR DOMESTIC

PARK CREEK
TOWN OF DUE WEST WWTP
PIPE #: 001 FLOW: 0.3

SC0022403
MINOR DOMESTIC

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME

FACILITY TYPE

PERMIT #

STATUS

ABBEVILLE COUNTY LANDFILL
DOMESTIC

DWP-110; 011001-1101; 011001-2001
INACTIVE DWP-915; 011002-1701

ABBEVILLE COUNTY LANDFILL
DOMESTIC

011001-1102
ACTIVE

ABBEVILLE COUNTY LANDFILL #1
DOMESTIC

DWP-011
INACTIVE

ABBEVILLE COUNTY LANDFILL #2
DOMESTIC

DWP-062
INACTIVE

ABBEVILLE COUNTY LANDFILL
INDUSTRIAL

INACTIVE

TOWN OF CALHOUN FALLS DUMP
DOMESTIC

INACTIVE

Water Quantity

WATER USER

STREAM

TOTAL PUMP. CAPACITY (MGD)

RATED PUMP. CAPACITY (MGD)

MCCORMICK CPW
LITTLE RIVER ARM OF LAKE THURMOND

2.8
2.7

Growth Potential

There is a moderate potential for growth in this watershed, which contains the Towns of Willington and Due West, and portions of the Towns of Antreville, Calhoun Falls, Mount Carmel, and Honea Path. Industrial growth is projected along the U.S. Hwy 76 corridor from Honea Path to Belton at the top of the watershed. Overall development trends are predicted to occur between Honea Path and Williamston (including Belton) along S.C. Hwy 20.

A relatively high growth area lies between the Towns of Lowndesville and Antreville and will be impacted by the development in Calhoun Falls, which resides next to Sawney Creek. Calhoun Falls has upgraded their treatment system, replacing the lagoon treatment system, and are better able to support future growth. The Calhoun Falls Industrial Park is located in Calhoun Falls on S.C. Hwy 72 and serves as a source for future industrial growth. The City of Abbeville resides just over the eastern watershed border and affects both watersheds. Sharing the same rail line is the Abbeville County Industrial Park, located on the southwest side of the City of Abbeville, another source of potential industrial growth within the watershed. The Sumter National Forest extends across the lower third of the watershed and would limit growth in that area.